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Hestenes et al.

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Hestenes et al.

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For: System for Encoding and Manipulating Models of Objects

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Keen
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#5/Patent
J. Hestenes
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PRELIMINARY AMENDMENT

Assistant Commissioner for Patents

Washington, D.C. 20231

Dear Sir:

Please enter this amendment before examining the application.

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In the Claims

1. A method for modeling an object composed of one or more components, comprising:

inputting data for each component of the object, the data including [Cartesian] coordinates expressed in Euclidean space [of] for a plurality of points \mathbf{x} of each component;

encoding each point \mathbf{x} as a null vector x in a [general] homogeneous space by $x = (\mathbf{x} + \frac{1}{2}\mathbf{x}^2 e + e_*)E = \mathbf{x}E - \frac{1}{2}\mathbf{x}^2 e + e_*$, where e and e_* are [basis] null vectors

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